

A4
Solaris (Trademark of Sun Microsystems) operating system, the following conditions must be checked: (1) the scanned server is running the Solaris operating system, and (2) the scanned server is running LPD. Thus, the rules are constructed to define a vulnerability if these two conditions are present.

IN THE CLAIMS:

~~Sub B1~~ Cancel claims 1-4 and add new claims 5-40 as follows:

1 5. A system for protecting a network, comprising:
2 a vulnerability detection system (VDS) for gathering information about the
3 network to determine vulnerabilities of a host on the network; and
4 an intrusion detection system (IDS) for examining network traffic responsive
5 to the vulnerabilities determined by the VDS to detect traffic indicative
6 of malicious activity.

1 6. The system of claim 5, wherein the VDS is adapted to gather information
2 about the network by sending data to the host and receiving responsive data from the
3 host.

1 7. The system of claim 5, wherein the VDS is adapted to gather information
2 automatically provided by the host.

1 8. The system of claim 5, further comprising:
2 a vulnerabilities rules database, in communication with the VDS, for storing
3 rules describing vulnerabilities of the host,
4 wherein the VDS is adapted to analyze the gathered information with the rules
5 to determine the vulnerabilities of the host.

1 9. The system of claim 8, wherein the VDS is adapted to analyze the gathered
2 information with the rules to identify an operating system on the host and determine the
3 vulnerabilities responsive to the operating system.

1 10. The system of claim 8, wherein the VDS is adapted to analyze the gathered
2 information with the rules to identify an open port on the host and determine the
3 vulnerabilities based on the open port.

~~11~~ 11. The system of claim 8, wherein the VDS is adapted to analyze the gathered
2 information with the rules to identify an application executing on the host and determine
3 the vulnerabilities based on the application.

~~12~~ 12. The system of claim 5, further comprising:
2 an intrusion rules database, in communication with the IDS, for storing rules
3 describing malicious activity,
4 wherein the IDS is adapted to analyze the network traffic with the rules to
5 detect network traffic indicative of exploitations of the determined
6 vulnerabilities.

1 13. The system of claim 5, wherein the IDS is adapted to detect traffic
2 indicative of exploitations of only the determined vulnerabilities.

1 14. The system of claim 5, wherein the VDS is adapted to verify the
2 determined vulnerabilities, and the IDS is adapted to detect traffic indicative of
3 exploitations of only the verified vulnerabilities.

~~15~~ 15. The system of claim 5, wherein the VDS is adapted to update the
2 determined vulnerabilities, and wherein the IDS is adapted to detect traffic indicative of
3 malicious activity in response to the update.

1 16. The system of claim 15, wherein the VDS is adapted to update the
2 determined vulnerabilities in response to a change in the network.

1 17. A method for protecting a network, comprising:
2 gathering information about the network to determine vulnerabilities of a host
3 on the network; and
4 examining network traffic responsive to the determined vulnerabilities to
5 detect network traffic indicative of malicious activity.

1 18. The method of claim 17, wherein gathering information comprises sending
2 data to a host on the network and receiving responsive data from the host.

1 19. The method of claim 17, wherein gathering information comprises
2 receiving data automatically provided by the host on the network.

1 20. The method of claim 17, further comprising:
2 storing rules to describe vulnerabilities of the host,
3 wherein determining vulnerabilities includes analyzing the gathered
4 information with the rules.

1 21. The method of claim 20, wherein determining vulnerabilities comprises
2 analyzing the gathered information with the rules to identify an operating system on the
3 host.

1 22. The method of claim 20, wherein determining vulnerabilities comprises
2 analyzing the gathered information with the rules to identify an open port on the host.

1 23. The method of claim 20, wherein determining vulnerabilities comprises
2 comparing the gathered information against the rules to identify an application on the
3 host.

1 24. The method of claim 17, further comprising:
2 storing rules describing malicious activity,
3 wherein detecting network traffic indicative of malicious activity comprises
4 analyzing the network traffic with the rules to detect traffic indicative of
5 exploitations of the determined vulnerabilities.

1 25. The method of claim 17, wherein examining network traffic consists of
2 detecting traffic indicative of exploitations of only the determined vulnerabilities.

1 26. The method of claim 17, further comprising:
2 verifying determined vulnerabilities,
3 wherein examining network traffic consists of detecting traffic indicative of the
4 exploitations of only the verified vulnerabilities.

1 27. The method of claim 17, further comprising:
2 updating the determined vulnerabilities in response to a change in the network;
3 and detecting traffic indicative of malicious activity in response to the
4 update.

1 28. The method of claim 27, wherein the updating is responsive to a change in
2 the network.

1 29. A computer program product, comprising:
2 a computer-readable medium having computer program logic embodied therein
3 for protecting a network, the computer program logic:
4 gathering information about the network to determine vulnerabilities of a host
5 on the network; and
6 examining network traffic responsive to the determined vulnerabilities to
7 detect network traffic indicative of malicious activity.

1 30. The computer program product of claim 29, wherein gathering information
2 comprises sending data to a host on the network and receiving responsive data from the
3 host.

1 31. The computer program product of claim 29, wherein gathering information
2 comprises receiving data automatically provided by the host on the network.

~~32.~~ 1 32. The computer program product of claim 29, further comprising:
2 storing rules to describe vulnerabilities of the host,
3 wherein determining vulnerabilities includes analyzing the gathered
4 information with the rules.

1 33. The computer program product of claim 32, wherein determining
2 vulnerabilities comprises analyzing the gathered information with the rules to identify an
3 operating system on the host.

1 34. The computer program product of claim 32, wherein determining
2 vulnerabilities comprises analyzing the gathered information with the rules to identify an
3 open port on the host.

1 35. The computer program product of claim 32, wherein determining
2 vulnerabilities comprises comparing the gathered information against the rules to detect
3 an application on the host.

1 36. The computer program product of claim 29, further comprising:
2 storing rules describing malicious activity,
3 wherein detecting network traffic indicative of malicious activity comprises
4 analyzing the network traffic with the rules to detect traffic indicative of
5 exploitations of the determined vulnerabilities.

1 37. The computer program product of claim 29, wherein examining network
2 traffic consists of detecting traffic indicative of exploitations of only the verified
3 vulnerabilities.

1 38. The computer program product of claim 29, further comprising:
2 verifying determined vulnerabilities,
3 wherein examining network traffic consists of detecting traffic indicative of the
4 exploitations of only the verified vulnerabilities.

1 39. The computer program product of claim 29, further comprising:
2 updating the determined vulnerabilities in response to a change in the network;
3 and
4 detecting traffic indicative of malicious activity in response to the update.

1 40. The computer program product of claim 29, wherein the updating is
2 responsive to a change in the network.
